## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (original): A process for producing a ferrite sintered body having a main composition of the following formula (1):

 $AFe^{2+}_{a}Fe^{3+}_{b}O_{27}$  ... (1)

wherein  $1.5 \le a \le 2.1$ ,  $14 \le a+b \le 18.5$ , and A is at least one element selected from Sr, Ba and Pb, the process comprising:

a calcining step of obtaining a calcined body from a raw material compound;

a first milling step of milling the calcined body to a predetermined size;

a heat treatment step of holding fine powder obtained from the first milling step for a predetermined time in a predetermined temperature range in an atmosphere having an oxygen concentration of 10% by volume or less;

a second milling step of milling the fine powder which has undergone the heat treatment step to a predetermined size;

a step of wet compacting the fine powder which has undergone the second milling step in a magnetic field; and

a sintering step of sintering the compacted body obtained by the wet compacting.

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Claim 2 (original): The process for producing a ferrite sintered body according to claim 1, wherein the heat treatment step is carried out in a temperature range of 600 to 1,200°C.

Claim 3 (original): The process for producing a ferrite sintered body according to claim 1, wherein the heat treatment step is carried out in a temperature range of 700 to 1,000°C.

Claim 4 (original): The process for producing a ferrite sintered body according to claim 1, wherein the predetermined time is between 1 second and 10 hours.

Claim 5 (original): The process for producing a ferrite sintered body according to claim 1, wherein the oxygen concentration is 1% by volume or less.

Claim 6 (original): The process for producing a ferrite sintered body according to claim 1, wherein the atmosphere is a nitrogen gas atmosphere.

Claim 7 (original): The process for producing a ferrite sintered body according to claim 1, wherein the milling conditions for the second milling step are more relaxed than the milling conditions for the first milling step.

Claim 8 (original): The process for producing a ferrite

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sintered body according to claim 1, wherein the fine powder which has undergone the first milling step and the fine powder which has undergone the second milling step have a mean particle size of between 0.08 and 0.8  $\mu m$ .

Claim 9 (original): The process for producing a ferrite sintered body according to claim 8, wherein the mean particle size is between 0.1 and 0.2  $\mu m$ .

Claim 10 (original): The process for producing a ferrite sintered body according to claim 1, wherein a carbon-containing material is added after performing the calcining step but prior to conducting the wet compacting.

Claim 11 (original): The process for producing a ferrite sintered body according to claim 1, wherein during the heat treatment step ultrafine particles of 0.05 µm or less are eliminated or decreased.

Claim 12 (original): A process for producing a ferrite sintered body comprising:

a first milling step of milling a calcined body in which  $Fe^{2+}$  and  $Fe^{3+}$  are formed into a milled powder having a mean particle size of between 0.08 and 0.8  $\mu m$ ;

a particle growth step of reacting some of particles constituting the milled powder with each other while

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maintaining the  $Fe^{2+}$  and  $Fe^{3+}$  to grow the particles; and

a second milling step of milling the milled powder having undergone the particle growth step to a mean particle size of between 0.08 and 0.8  $\mu m\,.$ 

Claim 13 (original): The process for producing a ferrite sintered body according to claim 12, wherein the particle growth step is carried out under a non-oxidative atmosphere.

Claim 14 (currently amended): The process for producing a ferrite sintered body according to claim 1 or 12, wherein the ferrite sintered body is a W-type ferrite sintered body.

Claim 15 (original): The process for producing a ferrite sintered body according to claim 14, wherein the ferrite sintered body comprises 50% or more of W-phase in terms of molar ratio.

Claim 16 (new): The process for producing a ferrite sintered body according to claim 12, wherein the ferrite sintered body is a W-type ferrite sintered body.